

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael Greenberg, applicant's representative, on Sept. 17, 2009.

The application has been amended as follows:

In the claims:

Claims 3-4, and 9-10 have been canceled.

Claims 1, 5, 7, 11, 19-20 have been amended as follows:

1. (Currently Amended) A computer implemented method of allowing entities to cooperate for implementing at least one process, the method being part of a computer system, comprising:

- (a) producing objects by at least one entity ~~on hardware~~;
- (b) associating each of the objects with at least one semantic term, said associating done by the at least one entity ~~on hardware~~;
- (c) allocating a tuple to each of the at least one semantic terms, the tuple containing information provided by each of the objects corresponding to a meaning of the at least one semantic term, allowing the tuple to be found in at least one tuple space ~~on hardware~~;

Art Unit: 2162

- (d) storing and retrieving information in the form of the tuple ~~on hardware~~;
- e) using the tuple to represent each of the objects involved in the at least one process, wherein at least one tuple type is registered by the at least one entity ~~on hardware~~;
- (f) representing conditions, under which the at least one entity can produce at least one of the objects by using at least one tuple template, the at least one tuple template generated by the at least one entity ~~on hardware~~; and
- (g) associating the at least one tuple template and the tuple with the at least one semantic term to form a type_i;
- (h) indicating the at least one semantic term in any order to represent a goal of the at least one process; and
- (i) generating streams representing chains of events composed of sequential events which terminate at the tuple corresponding to each of the at least one semantic terms.

5. (Currently Amended) The method of claim 1 further comprising:

- ~~(h_i)~~ generating semantic categories by aggregating any of the at least one semantic terms in any order.

7. (Currently Amended) An apparatus for allowing entities to cooperate for implementing at least one process, the apparatus being part of a computer system, comprising:

a processor for:

- (a) ~~means for~~ producing objects by at least one entity ~~on hardware~~;

(b) ~~means for~~ associating each of the objects with at least one semantic term, said means for associating done by the at least one entity ~~on hardware~~;

(c) ~~means for~~ allocating a tuple to each of the at least one semantic terms, the tuple containing information provided by each of the objects corresponding to a meaning of the at least one semantic term, allowing the tuple to be found in at least one tuple space ~~on hardware~~;

(d) ~~means for~~ storing and retrieving information in the form of the tuple ~~on hardware~~;

(e) ~~means for~~ using the tuple to represent each of the objects involved in at least one process, wherein at least one tuple type is registered by the at least one entity ~~on hardware~~; and

(f) ~~means for~~ representing conditions, under which the at least one entity can produce at least one of the objects by using at least one tuple template, the at least one tuple template generated by the at least one entity ~~on hardware~~; and

(g) ~~means for~~ associating the at least one tuple template and the tuple with the at least one semantic term to form a type;

(h) indicating the at least one semantic term in any order to represent a goal of the at least one process; and

(i) generating streams representing chains of events composed of sequential events which terminate at the tuple corresponding to each of the at least one semantic terms.

11. (Currently Amended) The apparatus of claim 7 further comprising: a processor for:

Art Unit: 2162

(h_j) ~~means for~~ generating semantic categories by aggregating any of the at least one semantic terms in any order.

19. (Currently Amended) The method of claim 1, further comprising:

(h_j) replacing the at least one tuple template from the tuple ~~on hardware~~, wherein the at least one tuple template and the tuple are of the same tuple type.

20. (Currently Amended) The ~~method~~ apparatus of claim 7, further comprising: a processor for:

(h_j) replacing the at least one tuple template from the tuple ~~on hardware~~, wherein the at least one tuple template and the tuple are of the same tuple type.

Allowable Subject Matter

2. Claims 1, 5, 7, 11, 19-20 are allowed (Re-numbered as 1-6).

3. The following is an examiner's statement of reasons for allowance:

Prior art of made of record does not teach or fairly suggest the combination of claimed elements including the steps of "(f) representing conditions, under which the at least one entity can produce at least one of the objects by using at least one tuple template, the at least one tuple template generated by the at least one entity; (g) associating the at least one tuple template and the tuple with the at least one semantic term to form a type; (h) indicating the at least one semantic term in any order to represent a goal of the at least one process; and (i) generating streams representing chains of events composed of sequential events which terminate at the tuple corresponding to

Art Unit: 2162

each of the at least one semantic terms” as recited in independent claim 1, and similar claimed elements in claim 7.

The dependent claims, being definite, further limiting, and fully enabled by the specification are also allowed.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THU-NGUYET LE whose telephone number is (571)270-1093. The examiner can normally be reached on M-F 9:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, John Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2162

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/Thu-Nguyet Le/
Examiner, Art Unit 2162

/John Breene/
Supervisory Patent Examiner, Art Unit 2162